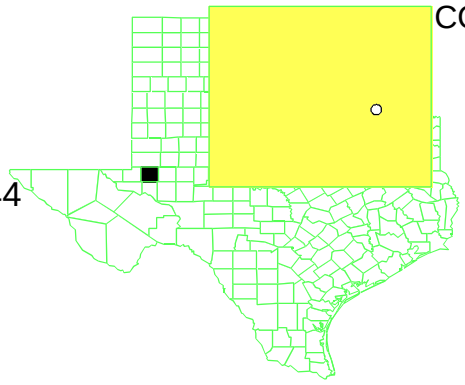
SPRAGUE ROAD
TEXAS
EPA ID# TX0001407444



EPA REGION 6
CONGRESSIONAL DISTRICT 19
Ector County
Odessa

Updated:

April 2000

Site Description

Location:
- Ector County, Texas; immediately north of the Odessa City limits

Population:
- The population within ½ mile of the site is approximately 400; the population within 1 mile of the site is approximately 400; the population within 4 miles of the site is approximately 18,600.

Setting:
- The site consists is approximately180 acres in size.
- This site consists of three separate inactive or abandoned chromium plating facilities within a 1/3 mile area - Leigh Metal Plating, Inc., National Chromium Corporation, and Machine and Casting, Inc.
- The individual facilities are less than 4 acres in size and located in a residential and light industrial area.
- Three plumes of chromium contaminated ground water are present at the site. The largest of the three plumes originates from the Leigh Metal Plating Inc. facility; the next largest plume originates from the National Chromium Corporation facility; the smallest plume originates from the Machine and Casting, Inc. facility.
- The site is a mixture of light to medium commercial operations with private residences mixed throughout the area. While some private residences are connected to the Odessa public water supply system, the majority of residences are dependent on a single, high-quality aquifer for their drinking water.

Hydrology:
- The Trinity aquifer is the only source of high-quality drinking water in the site area. The water table in the unconfined aquifer is present at approximately 85 feet below the ground surface. The base of the aquifer is present at approximately 145 feet below ground surface. The Triassic red beds form the base of the aquifer.
- Private wells yield an average of 24 gallons per minute.
- City of Odessa has 25 public water supply wells within 4 miles of the site that yield an average of 167 gallons per minute.

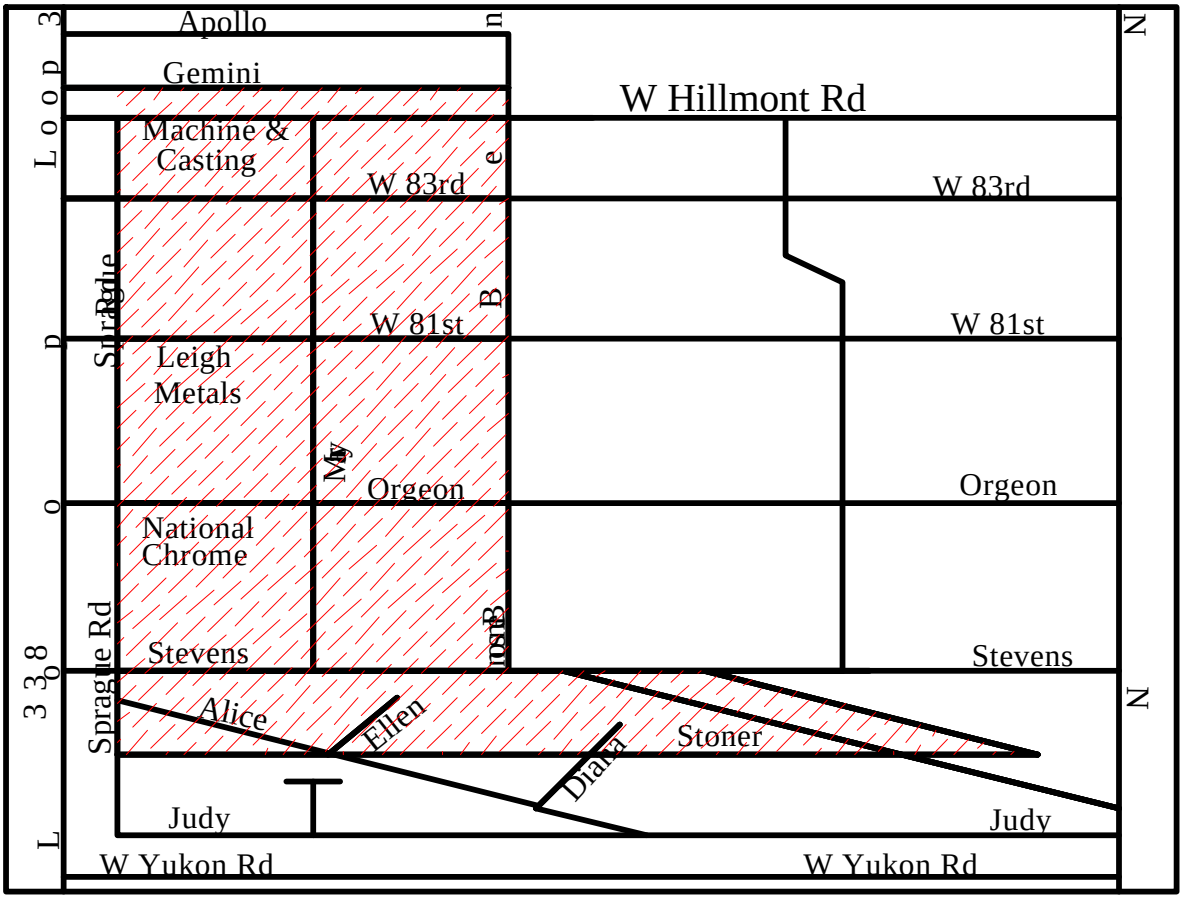
Wastes and Volumes

- Ground water contamination is from hexavalent chromium at all three facilities. Trichloroethene has also been detected in three off-site wells near the National Chrome facility.

Site Assessment and Ranking

NPL LISTING HISTORY
Site HRS Score:
Proposed Date: 04/01/97
Final Date: 09/25/97
NPL Update: No.

Site Map and Diagram



The Remediation Process

Site History:

- The past chrome plating operations are potential sources of a ground water contaminant plume containing chromium. The ground water serves as a source of drinking water in the area and chromium has been detected in seven private residential wells above the Maximum Contaminant Level. In 1993, permanent water distribution lines from the city of Odessa were installed to residents affected by the ground water contamination from Leigh Metal and Plating facility. Residents who are not connected to the public water supply lines still rely on private residential well water.
- In 1996, EPA conducted a response action by removing solid and liquid wastes at the Leigh Metal and Plating and National Chromium facilities; contaminated soil at the National Chromium facility was also removed. EPA also investigated the ground water contamination near the three facilities by installing twelve monitoring wells and collecting 40 water samples from monitoring wells and nearby private water supply wells. Sample analyses indicate that a chromium contaminant plume is present near the three facilities in concentrations exceeding the Maximum Contaminant Level. The size of the chromium plume has been estimated to be approximately 180 acres.
- Removal actions by EPA resulted in 6,620 gallons of liquid and solid wastes, 156,320 pounds of vat and tank liquid and sludge, and 5,187,340 pounds of soil being removed from this site.

Health Considerations:

- Chromium in the ground water poses a risk to residents in the area dependent on private water wells for drinking water. Chromium concentrations off-site from the three facilities exceed the MCL of 0.1 mg/L. The private residences and businesses in the vicinity of Leigh Metals are connected to the Odessa City water supply. Private residences in the vicinity of National Chromium and Machine and Casting still utilize private water wells.

Record of Decision

Signed:

Community Involvement

- Community Involvement Plan: Developed 11/97
- Open houses and workshops: 04/98, 07/98
- Proposed Plan Fact Sheet and Public Meeting:
- ROD Fact Sheet:
- Milestone Fact Sheets: 10/97
- Constituency Interest:
- Site Repository: Ector County Public Library in Odessa, Texas

Technical Assistance Grant

- Availability Notice: 10/97
- Letters of Intent Received: None
- Draft Application Received: N/A
- Grant Award: N/A
- Current Status: Available

Contacts

- **Remedial Project Manager (EPA):** Vincent Malott, 214-665-8313; Mail Code: 6SF-AP
- **State Contact:** Peter Waterreus, 512-239-2484, TNRCC
- **Community Involvement Coordinator (EPA):** Linda Rodriguez, 214-665-2138; Mail Code: 6SF-PO
- **Attorney (EPA):** Anne Foster, 214-665-2169; Mail Code: 6SF-DL
- **State Coordinator (EPA):** Karen Bond, 214-665-6682; Mail Code: 6SF-AP
- **Prime Contractor:** Tetra Tech EM, Inc.

Enforcement

- General Notice letters sent to 2 Potentially Responsible Parties (PRPs) - 05/21/98

Present Status and Issues

- EPA has completed the field investigation phase of the Remedial Investigation at this Site. EPA has collected and analyzed surface and subsurface soil samples at the three facilities, installed and sampled 33 ground water monitoring wells, and analyzed ground water from 74 private water supply wells. The field investigation was completed in three phases: 1) an initial site-wide ground water sampling conducted between June 1-10, 1998; 2) a second phase consisting of soil sampling and ground water monitoring well installation and sampling between October 5th and November 25th, 1998; and 3) a final phase of ground water sampling to evaluate changes in contaminant concentrations in selected monitoring wells between January 13-22, 1999.
- The draft Remedial Investigation report was completed in June 1999 and is currently being revised. The report provides the physical site characteristics affecting contaminant transport, the extent of contamination, and the corresponding risks from exposure to the contaminants. EPA is currently reviewing the report.
- The draft Feasibility Study is currently being revised. The FS Study will evaluate alternatives to remediate the contaminated soil and ground water.
- EPA is currently providing bottled water to three residences affected by chromium contamination in their private drinking water wells.

Benefits

- The bottled water will prevent exposure to contaminants for three private residences until the contamination can be addressed through a permanent solution.
- Remediation of the ground water contamination will allow unrestricted use of the aquifer, a primary source of water for drinking and irrigation in the local community.